

IN THE CLAIMS

This listing of the claim will replace all prior versions and listings of claim in the present application.

Listing of Claims

Claims 1-4 (canceled).

5. (original) An information recording method of recording information onto a phase-change disc while varying a linear velocity so as to allow the information to correspond to an edge of a recording mark formed in radiating light pulses from a light source to the phase-change disc, the method comprising the steps of:

performing test writing for inner and outer periphery zones of the disc at substantially equal linear velocities to each other, thus obtaining a recording parameter suitable for the inner periphery of the disc and a recording parameter suitable for the outer periphery thereof;

obtaining a recording parameter correction coefficient at a position with respect to a disc radius based on the recording parameter suitable for the inner periphery of the disc and the recording parameter suitable for the outer periphery thereof; and

correcting a recording parameter corresponding to a linear velocity at an area onto which the information is to be recorded, thus controlling said light source in accordance with said corrected recording parameter.

6. (original) The information recording method according to claim 5, wherein the recording parameter corresponding to said linear velocity at the area onto which the information is to be recorded is obtained based on the recording parameter suitable for each of the respective linear velocities obtained by performing the test writing for the outer periphery of said disc at the different linear velocities.

7. (currently amended) The information recording method according to claim 45, wherein said recording parameter includes recording power, erase power and a pulse width.

Claim 8 (canceled).

9. (currently amended) An optical disc apparatus which includes: a optical head having a light source radiating light onto an optical disc and a photodetector for detecting the light reflected from said optical disc; optical head driving means for driving said optical head relative to said optical disc; disc driving means for rotationally driving said optical disc while varying a linear velocity at a position of the optical head; and recording waveform generating means for generating a recording waveform to drive the light source, and which records information so as to allow the information to correspond to an edge of a recording mark, the optical disc apparatus further comprising:

means for performing test writing for inner and outer periphery zones of said optical disc at substantially equal linear velocities, thus obtaining recording

parameters suitable for the inner and outer periphery zones of said optical disc, and for obtaining a recording parameter correction coefficient at a position with respect to a disc radius based on the recording parameters respectively suitable for the inner and outer periphery zones,

wherein the recording waveform generating means corrects, by use of the recording parameter correction coefficient, a recording parameter corresponding to a linear velocity of an area onto which information is to be recorded and generates a recording waveform based on the corrected recording parameter.

10. (currently amended)The optical disc apparatus according to claim 89, wherein said recording parameter includes recording power, erase power and a pulse width.